United States Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, Washington 98101

AUTHORIZATION TO DISCHARGE AND LAND APPLY/TRANSFER SEWAGE SLUDGE (BIOSOLIDS) UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, 33 U.S.C. § 1251 et seq., as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act,"

City of Boise

is authorized to discharge from the West Boise Wastewater Treatment Facility, located in Boise, Idaho to receiving waters named the Boise River at approximately river mile 45.1 at the following location

Outfall Serial Number	Latitude	Longitude
001	43E 40' 30" N	116E 19' 53" W

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein, and is authorized to Land Apply/Transfer Biosolids, in accordance with application sites, specific limitations, monitoring requirements, management practices, and other conditions set forth herein. Authorization to land apply biosolids is limited to the outfall specifically listed in the permit.

This permit shall become effective November 2, 1999.

This permit and the authorization to discharge and Land Apply/Transfer Biosolids shall expire at midnight, November 2, 2004.

Signed this 30th day of September, 1999.

/s/ Randall F. Smith
Randall F. Smith
Director, Office of Water Region 10
U.S. Environmental Protection Agency

This permit modification shall become effective .

This permit modification and the authorization to discharge and Land Apply/Transfer Biosolids shall expire at midnight, .

Signed this day of .

_____
Randall F. Smith
Director, Office of Water, Region 10
U.S. Environmental Protection Agency

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I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Effluent Limitations.

1. During the effective period of this permit, the permittee is authorized to discharge wastewater to Boise River from Outfall 001 provided the discharge meets the limitations and monitoring requirements set forth herein. This permit does not authorize the discharge of any wastestreams, including spills and other unintentional or non-routine discharges of pollutants, that are not part of the normal operation of the facility as disclosed in the permit application. The following effluent limits shall apply.

PARAMETER		EFFLUENT LIMITATIONS		
		Average Monthly Limit	Average Weekly Limit	Daily Maximum Limit
Biochemical Oxygen Demand (BOD_5)		20 mg/L	30 mg/L	---
		2000 lbs/day	3000 lbs/day	—
Total Suspended Solids (TSS)		30 mg/L	45 mg/L	---
		3000 lbs/day	4500 lbs/day	---
May 1- September 30 Fecal Coliform Bacteria[1]		50/100 mL[2]	200/100 mL[3]	500/100 ml
October 1 - April 30 Fecal Coliform Bacteria[1]		200/100 ml	400/100 ml	800/100 ml
Total Residual Chlorine[1,4]		----	----	----
Dissolved Oxygen, % saturation		---	---	75[5]
Dissolved Oxygen, mg/L		---	—	6.0[5]
Copper[1,6,7,8] µg/L	**4/1 - 9/30**	9.9	---	20.0
	10/1 - 3/31	10.4		21.0
Lead[1,6,7,8] µg/L	**4/1 - 9/30**	2.52	—	5.50
	10/1 - 3/31	2.84		6.18

PARAMETER	EFFLUENT LIMITATIONS		
	Average Monthly Limit	Average Weekly Limit	Daily Maximum Limit

1 Reporting is required within 24 hours if the maximum daily limit is violated.
2 The average monthly fecal coliform count must not exceed a geometric mean of 50/100 ml based on a minimum of five daily samples taken over a 30 day period. The average shall be calculated as the average of all samples collected during the month.
3 The average weekly fecal coliform count must not exceed a geometric mean of 200/100 ml based on a minimum of five (5) daily samples per week. The average shall be calculated as the average of all samples collected during the week.
4 See Part I.A.6.b. for compliance schedule and interim limits.
5 Dissolved Oxygen Concentrations must exceed 6 mg/L or 75 percent of saturation, whichever is greater.
6 If an analytical value is "less than the method detection limit (MDL), the permittee shall report "< [numerical method detection limit]" on the DMR. For example, if the laboratory reports "not detected" for a sample, and states that the MDL is "5 µg/L" then the permittee shall report "< 5 µg/L" on the DMR. For the purposes of calculating averages, any value below the MDL may be set equal to zero. All other values shall be reported and used in calculating averages. For compliance levels, see section I.A.5.
7 These parameters shall be analyzed as total recoverable.
8 These limits shall become effective November 2, 2004. See Part I.A.6.a. of the permit for additional information on interim limits and monitoring requirements for these metals. Lead limits shall become effective two years after the effective date of this permit modification in accordance with the conditions of Part I.A.6. below.

2. The pH range shall be between 6.5 - 9.0 standard units. The permittee shall monitor for pH five (5) days per week. Sample analysis shall be conducted on grab samples from the effluent.

3. There shall be no floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions in the receiving water that may impair designated beneficial uses.

4. 85% Removal Requirements for BOD_5 and TSS: For any month, the monthly average effluent concentration shall not exceed 15 percent of the monthly average influent concentration.

   Percent removal of BOD_5 and TSS shall be reported on the Discharge Monitoring Reports (DMRs). For each parameter, the monthly average percent removal shall be calculated from the arithmetic mean of the influent values and the arithmetic mean of the effluent values for that month. Influent and effluent samples shall be collected over approximately the same time period.

5. The effluent limits for copper and lead are near or below detection limits using EPA-approved analytical methods. EPA will use the minimum level[1] (ML) or the interim minimum level (IML) as the compliance evaluation level for this parameter. Method detection limits for metals without limits can be found in I.C.6.

Parameter	ML, Fg/L	IML, Fg/L
Lead	5	---
Copper	5	----

6. Compliance Schedules.

   a. The permittee shall achieve compliance with the copper effluent limitations specified in Part I.A.1. no later than November 2, 2004.

      (1) Beginning November 2, 1999, and continuing until November 1, 2004, the following metals limitations shall apply:

EFFLUENT PARAMETER	EFFLUENT LIMITATIONS
	Monthly Average
Copper, Fg/L	23.3

      (2) The permittee shall submit an annual Report of Progress which outlines the progress made toward reaching the compliance date for metals effluent limitations. The annual report shall include an assessment of the previous year of metals data and comparison to final effluent limitations, a report on progress made toward meeting the final limitations, and milestones targeted for the upcoming year. The annual Report of Progress shall be submitted with the December 2000 DMR and annually thereafter, until compliance with the effluent limit is achieved.

[1] See Part IV.R., "Definitions" for definitions of minimum and interim minimum levels.

b. Beginning November 2, 1999 and continuing until final installation of the ultraviolet disinfection system, the following limitations shall apply for TRC:

EFFLUENT PARAMETER	EFFLUENT LIMITATIONS	
	Monthly Average	**Daily Maximum**
Total Residual Chlorine, mg/L	0.5	1.00

(1) Beginning February 2, 2000, and continuing quarterly until the ultraviolet disinfection process is fully implemented at the West Boise WWTF, the permittee shall submit a Report of Progress which outlines the progress made toward implementing ultraviolet disinfection.

(2) Once ultraviolet disinfection has been fully implemented at the West Boise WWTF, and the permittee has notified EPA, the TRC limitations and monitoring requirements will no longer be applicable.

c. The permittee shall achieve compliance with the lead effluent limitations specified in Part I.A.1. no later than two years after the effective date of this permit modification.

(1) Beginning with effective date of this permit modification and continuing for two years after the effective date of the permit modification, the following metals limitations shall apply:

EFFLUENT PARAMETER	EFFLUENT LIMITATION
	Monthly Average
Lead, Fg/L	3.09

(2) The permittee shall submit a quarterly Report of Progress which outlines the progress made toward reaching the compliance date for metals effluent limitations, including

any study plans for generating additional data to be used in determining reasonable potential for lead. The quarterly report shall include, at a minimum, an assessment of the previous quarter of metals data and comparison to final effluent limitations, a report on progress made toward meeting the final limitations, and milestones targeted for the upcoming quarter. The quarterly Report of Progress shall be submitted with the January 2001 DMR and quarterly thereafter, until compliance with the effluent limit is achieved.

7. This permit may be reopened if subsequent metals data gathered by the permittee show that metals permit limits should be revised or are not necessary.

B. Effluent Monitoring Requirements.

1. During the effective period of this permit, the following effluent monitoring requirements shall apply.

PARAMETER	MONITORING REQUIREMENTS[1]		
	Sample Location[2]	Sample Frequency	Sample Type
Flow, MGD	Influent	Continuous	Recording
Total Flow, cfs	South Channel	weekly[3]	—[3]
Biochemical Oxygen Demand (BOD_5)	Influent and Effluent	1/week	24-hour composite
Total Suspended Solids (TSS)	Influent and Effluent	1/week	24-hour composite
Fecal Coliform Bacteria	Effluent	5 days per week	grab
E. coli Bacteria	Effluent	1/week	grab
Total Ammonia as N, mg/L	Effluent	1/month	24-hour composite
Total Residual Chlorine, mg/L[4]	Effluent	5 days per week	grab
Total Kjeldahl Nitrogen, mg/L	Effluent	1/week	24-hour composite

PARAMETER	MONITORING REQUIREMENTS[1]		
	Sample Location[2]	Sample Frequency	Sample Type
Nitrate-Nitrite, mg/L	Effluent	1/week	24-hour composite
Total Phosphorus, mg/l	Effluent	1/week	24-hour composite
Ortho-Phosphate, mg/L	Effluent	1/ week	24-hour composite
Oil and Grease, mg/L	Effluent	1/week	8-hour grab composite
Temperature[5], EC	Effluent	5 days per week	grab
Turbidity, NTU	Effluent	1/week	24-hour composite
Hardness, as mg/L $CaCO_3$[6]	Effluent	---	24-hour composite
Alkalinity, as mg/L $CaCO_3$[6]	Effluent	---	24-hour composite
Arsenic[7], µg/L	Effluent	[8]	24-hour composite
Cadmium[7], µg/L	Effluent	[8]	24-hour composite
Copper[7], µg/L	Effluent	1/month	24-hour composite
Chromium[7], µg/L	Effluent	[8]	24-hour composite
Lead[7], µg/L	Effluent	1/month	24-hour composite
Mercury[7], µg/L	Effluent	[8]	24-hour composite
Nickel[7], µg/L	Effluent	[8]	24-hour composite
Silver[7], µg/L	Effluent	[8]	24-hour composite
Zinc[7], µg/L	Effluent	[8]	24-hour composite
Whole Effluent Toxicity[9], TU_c	Effluent	1/quarter	24-hour composite
Dissolved Oxygen, % saturation	Effluent	1/ week	grab[10]
Dissolved Oxygen, mg/L	Effluent	1/ week	grab[10]

PARAMETER	MONITORING REQUIREMENTS[1]		
	Sample Location[2]	Sample Frequency	Sample Type

1	If an analytical value is less than the method detection limit, the permittee shall report "< [numerical method detection limit]" on the DMR. For example, if the laboratory reports "not detected" for a sample, and states that the method detection limit is "5 µg/L" then the permittee shall report "< 5 µg/L" on the DMR. All other values shall be reported and used in calculating averages. For the purposes of calculating averages, any value below the MDL may be set equal to zero. For minimum levels and interim minimum levels see section I.A.5.
2	Effluent samples shall be collected after the last treatment unit prior to discharge.
3	Weekly monitoring shall begin by February 2, 2000. See I.B.3. of the permit for additional information on monitoring requirements for South Channel flow.
4	See Part I.A.6.b. Once the ultraviolet disinfection system has been installed and is operational, and EPA has been notified, chlorine monitoring requirements will no longer be in effect.
5	Weekly temperature samples shall be taken at the time of day when the water temperature is the highest. See Part I.B.4. for additional information on temperature monitoring requirements.
6	Beginning November 2, 1999 and continuing until November 2, 2002, quarterly monitoring shall be conducted. Thereafter, monitoring for this parameter shall follow the schedule for metals monitoring.
7	These parameters shall be analyzed as total recoverable, except for arsenic and mercury which shall be analyzed as total.
8	See Part I.B.2. of the permit for additional monitoring requirements.
9	See Section I.B.5. of the permit for additional information on monitoring requirements for whole effluent toxicity.
10	By May 2, 2000, the permittee shall notify EPA whether grab samples or continuous monitoring equipment shall be used for monitoring.

2. Metals Monitoring Requirements.

   a. Beginning November 2, 1999, and continuing until November 2, 2002, monitoring for arsenic, cadmium, chromium, mercury, nickel, silver, and zinc shall be conducted quarterly.
   b. Beginning November 3, 2002, monitoring for arsenic, cadmium, chromium, mercury, nickel, silver, and zinc shall be conducted monthly.

3. Flow Monitoring Requirements. The permittee shall develop and implement a method for measuring flows in the South Channel. Streamflow shall be determined using standard methods recognized by the US Geological Survey (USGS): gaging station data; discharge measurement[2]; estimation using all available information. The permittee shall not use estimates as the sole means of determining flow at all times. The permittee shall verify estimates with discharge measurements.

[2] See Part IV.R., "Definitions."

4. Temperature Monitoring Requirements.

   a. In addition to the weekly grab sample required in Part I.B.1., beginning November 2, 1999, and continuing until November 2, 2001, the effluent temperature shall be measured once per month, hourly for a twenty-four (24) hour period. This additional monitoring shall be concurrent with the twenty-four hour ambient temperature monitoring requirements (see Part I.C.9.).

   b. The permittee may use either grab samples or continuous monitoring equipment for temperature monitoring. Once the permittee has chosen a method, the permittee must notify EPA by letter and continue using that method for the life of the permit.

5. Whole Effluent Toxicity Testing Requirements.

   Beginning November 2, 1999, the permittee shall conduct quarterly toxicity tests on 24-hour composite effluent samples.

   a. Organisms and protocols

      (1) The permittee shall conduct static-renewal tests with the cladoceran, *Ceriodaphnia dubia* survival and reproduction test and the fathead minnow, *Pimephales promelas* larval survival and growth test for the first year. After this screening period, continued monitoring shall be conducted on the most sensitive species.

      (2) The most sensitive species is the one with the lowest IC25 from the immediately previous test. See Part IV.R. for a definition of IC25.

      (3) The presence of chronic toxicity shall be estimated as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* ("the manual"), Third Edition, EPA-600-4-91-002, July 1994.

   b. Each year the permittee shall re-screen for one quarter with two species and continue to monitor for the rest of the year with the

most sensitive species. The screening shall occur in a different quarter than the previous year.

c. Results shall be reported in TUc (chronic toxic units). TUc = 100/IC25 (in percent effluent).[3]

d. Chronic toxicity testing requirements are triggered when the IC25 exceeds 2.0 TUc during April through September, or when the IC25 exceeds 1.7 TUc during October through March.

e. Quality assurance

(1) A series of five dilutions and a control shall be tested. The series shall include the receiving water concentration (RWC), two dilutions above the RWC, and two dilutions below the RWC. For the period of April 1 - September 30, the RWC is **49.5 percent effluent**. For the period of October 1 - March 31, the RWC is **58.1 percent concentration**.

(2) Concurrent testing with reference toxicants shall also be conducted if organisms are not cultured in-house. Otherwise, monthly testing with reference toxicants is sufficient. Reference toxicants shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration and type).

(3) If the effluent tests do not meet all test acceptability criteria as specified in the manual, then the permittee must re-sample and re-test as soon as possible.

(4) Control and dilution water shall be synthetic, moderately hard laboratory water, as described in the manual. If the dilution water used is different from the culture water, a second control, using culture water shall also be used. Receiving water may be used as control and dilution water upon notification of EPA and IDEQ. In no case shall water that has not met test acceptability criteria be used as dilution water.

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[3] See Part IV.R., "Definitions".

f. Preparation of initial investigation toxicity reduction evaluation (TRE) plan

(1) By February 2, 2000, the permittee shall submit to EPA a copy of the permittee's initial investigation TRE workplan. This plan shall describe the steps the permittee intends to follow in the event that toxicity testing requirements as described in Part I.B.5.d. above, are triggered, and should include at a minimum:

(a) a description of the investigation and evaluation techniques that would be used to identify potential causes/sources of toxicity, effluent variability, treatment system efficiency;
(b) a description of the facility's method of maximizing in-house treatment efficiency, good housekeeping practices, and a list of all chemicals used in operation of the facility; and
(c) if a toxicity identification evaluation (TIE) is necessary, who will conduct it (i.e., in-house or other).

g. Accelerated testing

(1) If chronic toxicity testing requirements as defined in Part I.B.5.d. above are triggered, the permittee shall implement the initial investigation workplan. If implementation of the initial investigation workplan indicates the source of toxicity (for instance, a temporary plant upset), then only one additional test is necessary. If toxicity is detected in this test, then Part I.B.5.g.(2) shall apply.

(2) If chronic toxicity testing requirements as defined in Part I.B.5.d. above are triggered, then the permittee shall conduct six more tests, bi-weekly (every two weeks), over a twelve-week period. Testing shall commence within two weeks of receipt of the sample results of the exceedance.

h. TRE and toxicity identification evaluation (TIE)

(1) If chronic toxicity testing requirements as defined Part I.B.5.d. are triggered in any two of the six additional tests required under Part I.B.5.g.(2), then, in accordance with the permittee's initial investigation workplan and EPA manual EPA 833-B-99-002 (Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants), the permittee shall initiate a TRE within fifteen (15) days of receipt of the sample results of the exceedance. The permittee will develop as expeditiously as possible a more detailed TRE workplan, which includes:

(a) further actions to investigate and identify the cause of toxicity;
(b) actions the permittee will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity; and
(c) a schedule for these actions.

(2) The permittee may initiate a TIE as part of the overall TRE process described in the EPA acute and chronic TIE manuals EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III).

(3) If none of the six tests required under Part I.B.5.g.(2) above indicates toxicity, then the permittee may return to the normal testing frequency.

(4) If a TIE is initiated prior to completion of the accelerated testing, the accelerated testing schedule may be terminated, or used as necessary in performing the TIE.

i. Reporting

(1) The permittee shall submit the results of the toxicity tests, including any accelerated testing conducted during the month, in TUs with the discharge monitoring reports (DMR) for the month in which the test is conducted. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, pursuant to Part I.B.5.g.(1), then those results shall also be submitted with the DMR for the quarter in which the investigation occurred.

(2) The full report shall be submitted by the end of the month in which the DMR is submitted.

(3) The full report shall consist of: the results; the dates of sample collection and initiation of each toxicity test; the triggers as defined in Part I.B.5.d. above; the type of activity occurring; the flow rate at the time of sample collection; and the chemical parameter monitoring required for the outfall(s) as defined in the permit.

(4) Test results for chronic tests shall also be reported according to the chronic manual chapter on Report Preparation, and shall be attached to the DMR.

C. Receiving Water Monitoring.

1. By December 15, 1999, the permittee shall submit to EPA for approval, the location of receiving water monitoring stations.

   a. Until final approval by EPA, monitoring stations shall be maintained on the Boise River immediately upstream of the Lander Street discharge at the Veterans Parkway Bridge, immediately below the Lander Street discharge at the Glenwood Bridge, and immediately below the West Boise discharge. The Glenwood and Eagle Road Bridges shall be the upstream and downstream stations, respectively, for the West Boise discharge.

   b. Monitoring stations shall be located so as to minimize the influence of potential contamination from roadways.

2. For parameters that are monitored in the West Boise effluent and the river, sampling and analysis shall be conducted on the same days.

3. Receiving water monitoring for the West Boise and Lander Street permits shall be conducted on the same day(s).

4. Where USGS Equal Width Increment monitoring method is not employed, river composite samples shall consist of three grab samples, one from each side of the river and one from the middle.

5. The following parameters shall be sampled.

Parameter[1]	Upstream Sampling Frequency	Downstream Sampling Frequency
Flow, mgd	Recording	Recording
BOD_5, mg/L	1/month	1/month
TSS, mg/L	1/month	1/month
Dissolved Oxygen, mg/L	1/week	1/week
Total Phosphorus, mg/L	1/week	1/week
Ortho-phosphorus, mg/L	1/week	-----
Total Ammonia as N, mg/L	1/week	-----
Total Kjeldahl Nitrogen, mg/l	1/week	-----
Nitrate-Nitrite, mg/L	1/week	-----
Temperature[2], EC	1/week	1/week
pH, standard units	1/week	1/week
Hardness as $CaCO_3$, mg/L	[3]	[3]
Alkalinity as $CaCO_3$, mg/L	[3]	[3]
Oil & Grease, mg/L	1/month	-----
Turbidity, NTU	1/month	-----
Arsenic, µg/L	[3]	-----
Cadmium, µg/L	[3]	-----
Chromium, µg/L	[3]	-----
Copper, µg/L	[3]	-----
Lead, µg/L	[3]	-----
Mercury, µg/L	[3]	-----
Silver, µg/L	[3]	-----
Nickel, µg/L	[3]	-----
Zinc, µg/L	[3]	-----

Parameter[1]	Upstream Sampling Frequency	Downstream Sampling Frequency
Fecal Coliform Bacteria,[4] #/100 ml	1/month	1/month
E. coli bacteria, [4] #/100 ml	1/month	1/month

1 Cadmium, chromium, copper, lead, nickel, and zinc shall be analyzed as dissolved. Mercury and arsenic shall be analyzed as total.
2 Weekly temperature samples shall be taken at the time of the day when the water temperature is highest. See Part I.C.9. for additional temperature monitoring requirements.
3 See Part I.C.6. for monitoring frequency.
4 This parameter shall be collected as a grab sample.

6. Metals, Hardness, and Alkalinity Monitoring.

a. Beginning November 2, 1999, and continuing until November 2, 2002, metals, hardness, and alkalinity monitoring shall be conducted quarterly.

b. Beginning November 2, 2002, and continuing through the effective period of the permit, metals, hardness, and alkalinity monitoring shall be conducted monthly.

c. At a minimum, analytical methods shall achieve the following method detection limits.

Parameter	Method Detection Limit
Arsenic	2 µg/L
Cadmium	0.5 µg/L
Chromium	2 µg/L
Copper	1 µg/L
Lead	0.7 µg/L
Mercury	0.2 µg/L
Nickel	5 µg/L

Parameter	Method Detection Limit
Silver	0.5 µg/L
Zinc	5 µg/L

7. Reports shall be submitted by December 15th, March 15, June 15, and September 15 to EPA and Idaho, Division of Environmental Quality (DEQ). Each report shall include results from the upstream and downstream sampling, the daily flow from the Glenwood Bridge USGS gauging station on the day of sampling, and the daily effluent flow from the treatment plant on the day of sampling.

8. For TSS, pH and hardness the permittee shall use the test methods approved in Methods for Chemical Analysis of Water and Wastes, (EPA-600/4-79/020) or any other approved method listed in Table 1B of 40 CFR Part 136.

9. In addition to the weekly grab sample requirements, beginning November 2, 1999, and continuing until November 2, 2001, once per month, the upstream and downstream ambient temperature shall be measured hourly for a twenty-four (24) hour period. This additional monitoring shall be concurrent with the twenty-four hour effluent temperature monitoring requirements (see Part I.B.2.).

D. Sewage Sludge (Biosolids) Management Requirements.

1. The permittee shall comply with all existing federal and state laws and regulations that apply to its biosolids use or disposal practice. Additionally, the permittee shall ensure that the requirements of 40 CFR § 503 Subparts A, B, and D are met when the biosolids are used or disposed. See Appendix A of this permit.

2. The permittee shall handle and dispose of biosolids so the public health and the environment are protected from any reasonably anticipated adverse effects due to any toxic pollutants that may be present.

3. The Permittee shall ensure pollutants from the biosolids do not reach surface waters of the United States.

4. If the Permittee's biosolids are applied to the land, the Permittee is considered the person who applies biosolids for the purposes of determining compliance with the permit and compliance with the 40 CFR Part 503. This includes having records on actual agronomic loadings and on types of crops grown.

5. Class B biosolids applied to the land shall meet the following biosolids treatment requirements.

Disposal Method	Product	Requirements
Land Application	Class B biosolids only	1 **Pollutants:** Monthly Average Concentrations 40 CFR § 503.13(a)(2)(ii)[1] Ceiling Concentrations 40 CFR § 503.13(a)(1) 2 **Pathogens:** 40 CFR § 503.32(b)(3)[2]; Appendix B, No. 3, Anaerobic digestion 3 **Vector Control:** 40 CFR § 503.33(b)(1)[3]

1 The permittee may use 40 CFR § 503.13(a)(2)(I), Cumulative Loading Rates. The permittee must notify EPA, in writing, 30 days prior to switching methods.
2 The permittee may use 40 CFR § 503.32(b)(2), Class B fecal coliform counts.
3 The permittee may use 40 CFR § § 503.33(b)(2),503.33(b)(9), or 503.33(b)(10). The permittee must notify EPA, in writing, 15 days after discontinuing to use the primary method.

6. Biosolids may be distributed in the specific land application areas identified in Appendix B of this permit.

7. The permittee shall manage the sludge feedstock received at the West Boise facility to prevent harm to the public health or environment, and to ensure compliance with this permit and the 40 CFR Part 503 standards. A feedstock management plan shall be prepared to control the quality, quantity, storage, and receipt of sludge from other facilities.

   a. The plan shall be completed by November 2, 2001. Completion of the plan shall be reported on the DMR, and mentioned in the appropriate sludge report required by 40 CFR Part 503.

   b. A separate plan need not be prepared if the documentation of the pretreatment program, or some other plan or program,

contains sufficient scope and detail to manage all aspects of the quality, quantity, storage, and delivery of sludge from other facilities.

c. Pollutants in treatment plant sludge received at this facility shall meet the requirements of both Table 1 (individual samples) and Table 3 (monthly averages) of 40 CFR § 503.13 for land application. The permittee shall control other pollutants received in sewage sludge as necessary to protect the public health and the environment.

d. Sludge delivery shall be suspended or discontinued upon receipt of written instructions from EPA. If any other appropriate authority submits a written request to the sludge generator or recipient to suspend or cease any activities associated with sludge management, the permittee shall deliver a copy of this request to EPA within 3 days of receipt of the request. The term "appropriate authority" includes any federal, state, or local agency with regulatory authority over sludge management at either the generator or recipient facility. If ordered by EPA to cease biosolids delivery, the permittee may only resume delivery of sludge upon receipt of written authorization from EPA.

8. Pollutants contained in sludge from other sewage treatment works, or in sludge generated, processed, or handled at this facility, or land applied by this facility shall not be discharged to surface waters either directly or indirectly. Sludge from other facilities may not be received at this facility mixed with sewage, and may not be mixed with sewage within the plant. Sludge from this facility may not be mixed with sewage or other wastewater prior to treatment and discharge, or mixed with effluent prior to discharge, or discharged directly to surface waters.

9. The permittee may distribute Class B biosolids in crop trials of 2 acres or less. Crop trials may occur outside the land application sites listed in Appendix B. Notification of planned crop trials shall be sent to the Environmental Protection Agency, Idaho Operations Office, the applicable regional office of the Idaho Department of Health and Welfare if so required by the state, and to the office of the Natural Resources Conservation Service of the U.S. Department of Agriculture closest to the crop trial site. Crop trials may be conducted outside any existing biosolids (sewage sludge) site or distribution area established in this permit (need not comply with item 6 above). Crop trials shall

comply with all other requirements of the federal standards at 40 CFR Part 503 and the other requirements of this permit.

10. The permittee shall submit a report to EPA by February 19 of each year that includes the following information:

    a. if the biosolids was stockpiled (no use or disposal), disposed in the municipal waste landfill unit, and/or land applied during the previous year;

    b. the location(s) at which biosolids were used or disposed (if applicable); and

    c. if the permittee land applied biosolids, provide the information required at 40 CFR § 503.18(a)(1).

E. Pretreatment Program Sampling Requirements.

1. The permittee shall conduct sampling as described below each year, quarterly, for arsenic, cadmium, chromium, copper, cyanide, lead, mercury, nickel, silver, and zinc.

   The sampling protocol may be modified, if approved by EPA Region 10, without public notice, if the sampling data, as reported in the pretreatment annual report, indicate that pollutant levels are high enough that they may cause interference at the treatment plant, sludge contamination, or adverse effects on water quality. Conversely, if the data reported show that a pollutant is present at insignificant levels, that pollutant may be deleted from the sampling protocol, if approved by EPA Region 10.

2. Sampling shall be conducted on the influent, effluent, and final sludge. Each influent and effluent sample shall be a 24-hour composite. Final sludge samples shall consist of a single grab sample collected over the same period as the influent and effluent samples.

3. Influent and effluent samples shall be collected on three consecutive days in the same week (Monday through Friday). Sampling for these parameters shall be carried out concurrently with the monthly ambient monitoring (see Part I.B.1.).

4. The analytical results for the influent and effluent samples shall be reported as the total of the parameter in mg/L. Daily composite samples

shall be analyzed and reported separately. Analytical results for sludge shall be reported in mg/kg (dry weight). Additionally, the permittee shall report the percent of solids in the sludge. Influent results shall be compared with the maximum allowable headworks loadings calculated in the most recent local limits evaluation. Sampling results shall be submitted with the Pretreatment Annual Report (see Part II.D. of this permit).

5. Influent and effluent sampling for cyanide shall be conducted as follows. Eight discrete grab samples shall be collected over a 24-hour period (approximately 1 sample every 3 hours). Each grab sample shall be at least 100 ml. Each sample shall be checked for the presence of interferences (sulfides and chlorine) and any interferences must be removed prior to preserving and compositing (refer to *Standard Methods*, 4500-CN B). After testing and treating for chlorine and sulfides, the pH of each sample shall be adjusted, using sodium hydroxide, to 12.0 standard units. Each sample can then be composited into a larger container which has been chilled to 4 degrees Celsius to allow for one analysis for the day.
6. Within one year of the effective date of this permit modification, the permittee shall submit to EPA for review and approval, the results of a local limits study. The permittee shall conduct a local limits study to determine whether local limits are necessary. EPA and the permittee shall cooperate to develop mutually agreeable study methods prior to the initiation of the study. Local limits are required as necessary to comply with the prohibitions listed in 40 CFR § 403.6(a)(1) and (b). The study shall take into account water quality in the receiving stream, inhibition levels for biological processes in the treatment plants, and sludge quality goals. The study shall address at least the following pollutants: arsenic, cadmium, chromium, copper, cyanide, lead, mercury, nickel, silver, and zinc. The study shall also assess industrial and commercial sources and characterize their discharges. The study shall calculate the maximum allowable headworks loadings for the metals set forth above, as well for as any other pollutant that reasonably may interfere with or pass through the POTW. The study shall also determine what local limits are required to ensure that the maximum allowable headworks loadings established by the City are not exceeded. Results of the study shall include proposed local limits if appropriate, maximum allowable headworks loadings, all supporting calculations, and all assumptions. The local limits study shall include a “key manhole” sampling program to characterize potential sources of contaminants within the collection system. If the permittee encounters elevated levels

of metals in any of its key manhole studies, the permittee shall undertake further investigation to ascertain the source of the metals. If no local limits are proposed, the Permittee shall include with the study and documentation a discussion and justification for not implementing local limits. If the permittee concludes that local limits are necessary, the City shall promulgate local limits within 120 days after EPA's approval of the local limits.

7. Organic Toxicant Sampling.

a. The permittee shall perform chemical analyses of its influent, sludge and effluent for all specific toxic organic pollutants listed in Table II of Appendix D of 40 CFR Part 122, every two years from the effective date of this permit. The influent and effluent samples shall be 24-hour daily composites, except where sampling volatiles. (See below for sampling requirements for volatiles.)

b. Eight discrete samples shall be collected over 24 hours (approximately 1 sample approximately every 3 hours) using 40 ml VOC vials with Teflon septa. During sampling, the flow from the discharge will be controlled to produce smooth laminar flow to prevent agitation and aeration of the sample. The VOC vials will be filled to the top such that there is a meniscus present. There should be no visible air space or air bubbles in the VOC vials when capped. A single analysis for volatile pollutants may be run for each monitoring day by compositing equal volumes of the individual discrete VOC vials (at the laboratory conducting the analysis using extreme care not to introduce air/air bubbles) directly into the GC purge and trap apparatus, with no less than 1 ml of each grab included in the composite. The analysis of the composite must be performed immediately. The individual discrete samples shall be prepared, preserved, shipped, and analyzed in accordance with USEPA Methods 624 and 625.

The results of the total organic pollutants analysis shall be submitted with the annual pretreatment report. (See Part II.D.)

F. Quality Assurance Plan.

1. The permittee shall develop a Quality Assurance Plan. The primary purpose of the Quality Assurance Plan shall be to assist in planning for

the collection and analysis of samples in support of the permit and in explaining data anomalies when they occur.

2. Throughout all sample collection and analysis activities, the permittee shall use the EPA approved quality assurance, quality control, and chain-of-custody procedures described in EPA QA/R-5 EPA *Requirements for Quality Assurance Project Plans* and EPA QA/G-5 *Guidance on Quality Assurance Project Plans*. The following reference may be helpful in preparing the Quality Assurance Plan for this permit: *The Volunteer Monitors Guide to Quality Assurance Project Plans* EPA 841-B-96-003, September 1996. These documents are available on the EPA Region 10 website at: http://www.epa.gov/r10earth/offices/oea/r0qahome.htm.

3. The Permittee must maintain this plan for a period of five years, and must make this plan available to the EPA upon request.

4. At a minimum the plan shall include the following: sampling techniques (field blanks, replicates, duplicates, control samples, etc); sampling preservation methods; sampling shipment procedures; instrument calibration procedures and preventive maintenance (frequency, standard, spare parts); qualification and training of personnel; analytical methods (including quality control checks, quantification/detection levels); and analytical test methods that will be used to achieve the method detection limits in Part I.C.6.

5. Name(s), address(es) and telephone number(s) of the laboratories, used by or proposed to be used by the permittee, shall be specified in the Quality Assurance Plan.

6. The permittee may obtain copies of all references cited in this part of the permit from the following address:

Quality and Data Management Program
Office of Environmental Assessment
U.S. EPA, Region 10
1200 6th Avenue, OEA-095
Seattle, Washington 98101.

G. Design Criteria Requirements.

1. The design criteria for the permitted facility is as follows:

Design Criteria		
Criteria	**Value**	**Units**
Average Flow	24	mgd
Influent BOD_5 Loading	41,600	lbs/day
Influent TSS Loading	48,800	lbs/day

2. Each month, the permittee shall compute an annual average value for flow, and BOD_5 and TSS loading entering the facility based on the previous twelve months data or all data available, whichever is less. If the facility performs plant upgrades that affect design criteria listed in the table, only data collected after the upgrade should be used in determining the annual average value. When the average annual values exceed 85% of the design criteria values listed in the table, the permittee shall develop a facility plan and schedule within one year from the date of first exceedance. The plan must include the permittee's strategy for continuing to maintain compliance with effluent limits and will be made available to the Director or authorized representative upon request.

H. Operation and Maintenance Plan Review.

1. By May 2, 2000, the permittee shall review its operation and maintenance (O&M) plan and ensure that it includes appropriate best management practices (BMPs); the plan must be reviewed annually thereafter. BMPs include measures which prevent or minimize the potential for the release of pollutants to the Boise River. The Plan shall be retained on site and made available to EPA and DEQ upon request.

2. The permittee shall develop a description of pollution prevention measures and controls appropriate for the facility. The appropriateness and priorities of controls in the Plan shall reflect identified potential sources of pollutants at the facility. The description of BMPs shall address, to the extent practicable, the following minimum components: spill prevention and control; optimization of chemical usage; preventive maintenance program; minimization of pollutant inputs from industrial users; research, develop and implement a public information and education program to control the introduction of household hazardous materials to the sewer system; and water conservation.

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

A. Representative Sampling.

1. Final effluent samples taken in compliance with the monitoring requirements established under Part I shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge.

2. Biosolids samples used to measure compliance with Part I.D. of this permit shall be collected at location representative of the quality of biosolids generated at the treatment works and immediately prior to land application.

3. Sludge samples required under Part I.E. shall be collected at the discharge from the sludge digester.

4. Influent samples shall be collected at the headworks of the treatment plant prior to combination with any recirculation flows.

B. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

C. Reporting of Monitoring Results. Monitoring results conducted in compliance with Parts I.A.–C. of this permit shall be summarized each month on the Discharge Monitoring Report (DMR) form (EPA No. 3320-1). The reports shall be submitted monthly and are to be postmarked by the 10th day of the following month. Legible copies of these, and all other reports, shall be signed and certified in accordance with the requirements of Part IV.J., Signatory Requirements, and submitted to the Director, Office of Water and the State agency at the following addresses:

original to: United States Environmental Protection Agency (EPA) Region 10
1200 Sixth Avenue, OW-133
Seattle, Washington 98101,

copy to: Division of Environmental Quality
1445 North Orchard
Boise, Idaho 83706.

D. Pretreatment Report. The permittee shall provide to the U.S. Environmental Protection Agency Region 10 an annual report that describes the permittee's program activities over the October 1 to September 30 report year. One copy of this report shall be submitted to the following address no later than November 1 of each year:

Pretreatment Coordinator
U.S. Environmental Protection Agency (EPA) Region 10
1200 Sixth Avenue, OW-130
Seattle, WA 98101.

The report shall be compiled following the Region 10 Annual Report Guidance, which details the format and contents required for the report. The report shall include, but not be limited to:

1. An updated non-domestic user inventory, including those facilities that are no longer discharging (with explanation), and with new dischargers appropriately categorized and characterized. Categorical users should have the applicable category noted as well as cases where more stringent local limits apply instead of the categorical standard.

2. Results of wastewater sampling at the treatment plants as specified in Part I.E. In addition, the permittee shall calculate removal rates for each pollutant for each sample date and discuss whether existing local limits contained in the permittee's ordinance continue to be appropriate to prevent treatment plant interference and pass through of pollutants that could affect water quality or preclude beneficial uses of the biosolids. A comparison of the influent levels with the maximum allowable headworks loading used in the most recent local limits evaluation shall be included in the report.

3. Status of program implementation activities.

   a. Any planned modifications to the pretreatment program originally approved by the U.S. Environmental Protection Agency, including staffing and funding updates.

   b. Any interference, upset, or NPDES permit limits exceedances experienced at the POTW which were directly or indirectly attributable to non-domestic users including:

(1) date & time of the incident;
(2) description of the effect on the POTW's operation;
(3) effects on the POTW's effluent and biosolids quality;
(4) identification of suspected or known sources of the discharge causing the upset; and
(5) steps taken to remedy the situation and to prevent recurrence.

c. Listing of non-domestic users inspected and/or monitored during the year with a summary of results.

d. Listing of non-domestic users planned for inspection and/or monitoring for the coming year along with associated frequencies.

e. Listing of non-domestic users notified of promulgated pretreatment standards and/or local standards, as required in 40 CFR § 403.8(f)(2)(iii).

f. Listing of non-domestic users whose permits have been issued, reissued or modified along with current permit expiration dates.

g. Listing of non-domestic users notified of promulgated pretreatment standards or applicable local standards who are on compliance schedules. The listing should include the final date of compliance for each facility.

4. Status of enforcement activities.

a. Listing of non-domestic users who did not comply with applicable pretreatment standards or requirements, a summary of the noncompliance(s), the enforcement action taken or planned by the City, and the present compliance status as of the date of preparation of the pretreatment annual report.

b. Listing of non-domestic users in Significant non-compliance (SNC) as defined in 40 CFR. § 403.8(f)(2)(vii). A copy of all SNC public notices in the newspaper should be included in the report.

E. Additional Monitoring by the Permittee. If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data

submitted in the DMR, pretreatment, or Biosolids Report. Such increased frequency shall also be indicated.

F. Records Contents. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;

2. The individual(s) who performed the sampling or measurements;

3. The date(s) analyses were performed;

4. The individual(s) who performed the analyses;

5. The analytical techniques or methods used; and

6. The results of such analyses.

G. Retention of Records. With the exception of biosolids, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. All biosolids records shall be retained for a period of five years. This period may be extended by request of the Director at any time. A copy of this NPDES permit must be maintained on-site during the duration of activity at the permitted location. Data collected on-site and copies of Discharge Monitoring Reports (DMRs) must be maintained on-site for three years, after which they may be stored off-site.

H. Twenty-four Hour Notice of Noncompliance Reporting.

1. The following occurrences of noncompliance shall be reported by telephone within 24 hours from the time the permittee becomes aware of the circumstances:

a. any noncompliance which may endanger health or the environment;

b. any unanticipated bypass which exceeds any effluent limitation in the permit (See Part III.H,. Bypass of Treatment Facilities.);

c. any upset which exceeds any effluent limitation in the permit (See Part III.H., Upset Conditions.); or

d. violation of a maximum daily discharge limitation for those toxic or hazardous pollutants identified in Part I.A.2. of the permit to be reported within 24 hours.

2. The permittee shall report any noncompliance, including transportation accidents, spills, and uncontrolled runoff from biosolid transfer or land application sites which may seriously endanger health or the environment as soon as possible, but no later than 24 hours from the time the permittee first became aware of the circumstances. The report shall be made to the EPA, Region 10 at (206) 553-1846.

3. The following occurrences of noncompliance with biosolids requirements shall be reported by telephone to the EPA, Region 10, NPDES Compliance Unit in Seattle, Washington, by phone, (206) 553-1846 by the first workday (8:00 a.m. - 4:30 p.m. PST) following the day the permittee became aware of the circumstances:

a. violation of any limits of 40 CFR § 503.13, Table 1 (maximum individual sample) or Table 3 (monthly average);

b. violation of the pathogen limits;

c. violation of the vector attraction reduction limits; or

d. violation of the management practices for biosolids that has been land applied.

4. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:

a. a description of the noncompliance and its cause;

b. the period of noncompliance, including exact dates and times;

c. the estimated time noncompliance is expected to continue if it has not been corrected; and

d. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

5. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the NPDES Compliance Unit in Seattle, Washington, by phone, (206) 553-1213.

6. Reports shall be submitted to the addresses in Part II.C., Reporting of Monitoring Results.

I. Other Noncompliance Reporting. Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Part II.C. are submitted. The reports shall contain the information listed in Part II.H.2.

J. Inspection and Entry.

1. The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:

a. enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit including, but not limited to, biosolids treatment, collection, storage facilities or area, transport vehicles and containers, and land application sites; and

d. sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location including, but not limited to, digested biosolids before dewatering, dewatered biosolids, biosolids transfer or staging areas, any ground or

surface waters at the land application sites, or biosolids, soils, or vegetation on the land application sites.

2. The permittee shall make the necessary arrangements with the landowner or leaseholder to obtain permission or clearance, so that the Director, or authorized representative thereof, upon the presentation of credentials and other documents as may be required by law, will be permitted to enter without delay for the purposes of performing their responsibilities.

III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

B. Penalties for Violations of Permit Conditions.

1. Civil Penalty. The Act provides that any person who violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be subject to a civil penalty, not to exceed $27,500 per day for each violation.

2. Criminal Penalties.

a. Negligent Violations. The Act provides that any person who negligently violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act; or negligently introduces into a sewer system or into a publicly owned treatment works any pollutant or hazardous substance which such person knew or reasonably should have known could cause personal injury or property damage or, other than in compliance with all applicable federal, state, or local requirements or permits, which causes such treatment works to violate any effluent limitation or condition in a permit issued to the treatment works under Section 402 of this Act; shall be punished by a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or by both.

b. Knowing Violations. The Act provides that any person who knowingly violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act; or knowingly introduces into a sewer system or into a publicly owned treatment works any pollutant or hazardous substance which such person knew or reasonably should have known could cause personal injury or property damage or, other than in compliance with all applicable federal, state, or local requirements or permits, which causes such treatment works to violate any effluent limitation or condition in a permit issued to the treatment works under Section 402 of this Act; shall be punished by a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or by both.

c. Knowing Endangerment. The Act provides that any person who knowingly violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this subparagraph, be subject to a fine of not more than $1,000,000.

d. False Statements. The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Act or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this Act, shall upon conviction, be punished by a fine of not more that $10,000, or by imprisonment for not more than 2 years, or by both.

Except as provided in permit conditions in Part III.G., Bypass of Treatment Facilities and Part III.H., Upset Conditions, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

C. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

F. Removed Substances. Collected screenings, grit, solids, biosolids, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

G. Bypass of Treatment Facilities.

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this section.

2. Notice.

a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.

b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.G., Twenty-four Hour Notice of Noncompliance Reporting.

c. Prohibition of bypass.

(1) Bypass is prohibited and the Director may take enforcement action against a permittee for a bypass, unless:

(a) the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
(b) there were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
(c) the permittee submitted notices as required under paragraph 2 of this section.

(2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 3.a. of this section.

H. Upset Conditions.

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. an upset occurred and that the permittee can identify the cause(s) of the upset;

b. the permitted facility was at the time being properly operated;

c. the permittee submitted notice of the upset as required under Part II.G., Twenty-four Hour Notice of Noncompliance Reporting; and

d. the permittee complied with any remedial measures required under Part III.D., Duty to Mitigate.

3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

I. Pretreatment Program Requirements.

1. The permittee shall implement its Pretreatment Program in accordance with the legal authorities, policies, procedures, staffing levels and financial provisions described in its original approved pretreatment program submission entitled: Industrial Waste Pretreatment Program, City of Boise, dated July 13, 1984; any program amendments submitted thereafter and approved by EPA, and the General Pretreatment Regulations (40 CFR Part 403) including any amendments. At a minimum, the following pretreatment implementation activities shall be undertaken by the permittee.

a. Enforce categorical pretreatment standards promulgated pursuant to section 307(b) and (c) of the Act, prohibitive discharge standards as set forth in 40 CFR § 403.5 or local limitations developed by the permittee in accordance with 40 CFR § 403.5(c), whichever are more stringent or are applicable to non-domestic users discharging wastewater into the permittee's collection system. Locally derived limitations shall be defined as pretreatment standards under section 307(d) of the Act and shall not be limited to categorical industrial facilities.

b. Implement and enforce the requirements of the most recent and effective portions of local law and regulations (e.g. municipal code, sewer use ordinance) addressing the regulation of non-domestic users.

c. Update its inventory of non-domestic users at a frequency and diligence adequate to ensure proper identification of non-domestic users subject to pretreatment standards, but no less than once per year. The permittee shall notify these users of

applicable pretreatment standards in accordance with 40 CFR § 403.8(f)(2)(iii).

d. Issue, reissue and modify, in a timely manner, industrial wastewater discharge permits to at least all Significant Industrial Users (SIUs). These documents shall contain, at a minimum, conditions identified in 40 CFR § 403.8(f)(1)(iii). The permittee shall follow the methods described in its implementation procedures for issuance of individual permits.

e. Develop and maintain a data management system designed to track the status of the permittee's non-domestic user inventory, non-domestic user discharge characteristics, and their compliance with applicable pretreatment standards and requirements. In accordance with 40 CFR § 403.12(o), the permittee shall retain all records relating to its pretreatment program activities for a minimum of three (3) years and shall make such records available to the EPA upon request. The permittee shall also provide public access to information considered effluent data under 40 CFR Part 2.

f. Establish, where necessary, contracts or legally binding agreements with contributing jurisdictions to ensure compliance with applicable pretreatment requirements by non-domestic users within these jurisdictions. These contracts or agreements shall identify the agency responsible for the various implementation and enforcement activities to be performed in the contributing jurisdiction. In addition, the permittee may be required to develop a Memorandum of Understanding (Agreement) that outlines the specific roles, responsibilities and pretreatment activities of each jurisdiction.

g. Carry out inspections, surveillance, and monitoring on non-domestic users to determine compliance with applicable pretreatment standards and requirements. A thorough inspection of SIU(s) shall be conducted at least annually. Frequency of wastewater sampling for the SIU(s) shall be commensurate with the character and volume of the wastewater, but shall not be less than two (2) times per year. Sample collection and analysis shall be performed in accordance with 40 CFR § 403.12(b)(5)(ii) through (v) and 40 CFR Part 136.

h. Enforce and obtain remedies for non-compliance by any non-domestic user with applicable pretreatment standards and requirements. This shall include timely and appropriate reviews of industrial reports to identify all violations of the user's permit or the permittee's local ordinance. Once violations have been uncovered the permittee shall take timely and appropriate action to address the noncompliance. The permittee's enforcement actions shall comply with its approved enforcement response procedures.

i. Publish, at least annually in the largest daily newspaper in the permittee's service area, a list of all non-domestic users which, at any time in the previous 12 months, were in Significant Non-Compliance as defined in 40 CFR § 403.8(f)(2)(vii).

j. Maintain adequate staff, funds and equipment to implement its pretreatment program.

2. The permittee shall implement an accidental spill prevention program to reduce and prevent spills and slug discharges of pollutants from non-domestic users.
3. If the permittee elects to conduct all the non-domestic user monitoring in lieu of requiring self-monitoring by its SIUs, the permittee shall conduct sampling, monitoring and analyses for all regulated pollutants in accordance with 40 CFR § 403.12(b)(5)(ii) through (v), 40 CFR § 403.12(g) and 40 CFR Part 136. The frequency of sampling shall be commensurate with the character and volume of the discharge and shall provide the permittee with ample data to determine compliance, but in no case shall sampling be less than 2 times a year spaced at six (6) month intervals.

4. Whenever, on the basis of information provided to the U.S. Environmental Protection Agency, it has been determined that any source contributes pollutants to the permittee's treatment works in violation of subsection (b), (c), or (d) of section 307 of the Act, notification shall be provided to the permittee. Failure by the permittee to commence an appropriate enforcement action within 30 days of this notification may result in appropriate enforcement action by the EPA against the source and permittee.

5. If the permittee elects to modify any components of its pretreatment program, it shall comply with the requirements of 40 CFR § 403.18. No

substantial program modification may be implemented prior to receiving written authorization from EPA.

6. Sampling - See Part I.E.

7. Reporting - See Part II.D.

IV. GENERAL REQUIREMENTS

A. Notice of New Introduction of Pollutants. The permittee shall provide adequate notice to the Director, Office of Water, of:

1. any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to sections 301 or 306 of the Act if it were directly discharging those pollutants; and

2. any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

3. For the purposes of this section, adequate notice shall include information on:

a. the quality and quantity of effluent to be introduced into such treatment works; and

b. any anticipated impact of the change on the quantity or quality of effluent to be discharged from such publicly owned treatment works.

B. Control of Certain Pollutants. Under no circumstances shall the permittee allow introduction of the following wastes into the waste treatment system.

1. Wastes which will create a fire or explosion hazard in the treatment works;

2. Wastes which will cause corrosive structural damage to the treatment works, but in no case, wastes with a pH lower than 5.0, unless the works is designed to accommodate such wastes;

3. Solid or viscous substances in amounts which cause obstructions to the flow in sewers, or interference with the proper operation of the treatment works;

4. Wastewaters at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency; and

5. Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a discharge of such volume or strength as to cause interference in the treatment works.

C. Requirements for Industrial Users. The permittee shall require any industrial user of these treatment works to comply with any applicable requirements of sections 204(b), 307, and 308 of the Act, including any requirements established under 40 CFR Part 403.

D. Planned Changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit.

E. Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

F. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

G. Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit.

H. Duty to Provide Information. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this

permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

I. Other Information. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts or information.

J. Signatory Requirements. All applications, reports or information submitted to the Director shall be signed and certified.

1. All permit applications shall be signed by either a principal executive officer or ranking elected official.

2. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. the authorization is made in writing by a person described above and submitted to the Director, and

   b. the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

3. If an authorization under paragraph IV.J.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph IV.J.2. must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Any person signing a document under this section shall make the following certification.

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a

system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

K. Availability of Reports. Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the State water pollution control agency and the Director. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.

L. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the Act.

M. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

N. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

O. Transfers. This permit may be automatically transferred to a new permittee if:

1. the current permittee notifies the Director at least 30 days in advance of the proposed transfer date;

2. the notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

3. the Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the

permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.

P. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by section 510 of the Act.

Q. Reopener Provision. This permit is subject to modification, revocation and reissuance, or termination at the request of any interested person (including the permittee) or upon EPA initiative. However, permits may only be modified, revoked or reissued, or terminated for the reasons specified in 40 CFR §122.62 or 122.64, and 40 CFR §124.5. This includes new information which was not available at the time of permit issuance and would have justified the application of different permit conditions at the time of issuance, including but not limited to future monitoring results. All requests for permit modification must be addressed to EPA in writing and shall contain facts or reasons supporting the request.

R. Definitions.

1. "Agronomic rate" is the whole sludge (biosolids) application rate (dry weight basis) designed: to provide the amount of nitrogen and phosphorus needed by the crop or vegetation grown on the land and to minimize the amount of nitrogen and phosphorus that passes below the root zone of the crop or vegetation grown on the land to the ground water. Agronomic rate shall consider other sources of nitrogen, reasonable estimate of crop yields, and other practices appropriate to the site and crop.

2. "Ambient monitoring" means receiving water monitoring.

3. "Annual Average" means the sum all values reported in a twelve month period divided by the number of values.

4. "Application Site or Land Application Site" means all contiguous areas of a users' property intended for biosolids application.

5. "Average monthly discharge limitation" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

6. "Average weekly discharge limitation" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

7. "Biosolids" means any sewage sludge or material derived from sewage sludge.

8. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

9. "Class B" biosolids means sewage sludge treated for the control of pathogens by one of the methods listed in 40 CFR § 503.32(b)(2) -(b)(4).

10. "Chronic toxicity" measures a sublethal effect (e.g., reduced growth, reproduction) in an effluent or ambient waters compared to that of the control organisms.

11. "Crop trial" means applying biosolids as a soil amendment on an area of land two (2) acres or less for the purpose of developing appropriate agricultural practices.

12. "Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

13. "Discharge measurement" means measuring width, depth, and velocities using a tape or tagline, sounding equipment, and a current meter.

14. A "grab" sample, for monitoring requirements, is a single "dip and take" sample or measurement taken at a specific time or over as short a period of time at a representative point anywhere in wastewater treatment or biosolids land application processes, as is feasible.

15. A "grab-composite" means a sample that consists of a minimum of 3 aliquots over an 8-hour period.

16. "Industrial user," "user," or "non-domestic user" means a source of indirect discharge regulated under section 307(b), (c), or (d) of the Act. "Indirect discharge" means an introduction of pollutants from any non-domestic source regulated under section 307(b), (c), or (d) of the Act.

17. "Inhibition concentration, IC," means a point estimate of the toxicant concentration that causes a given percent reduction (p) in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (the EPA Interpolation Method). The effective concentration, EC, is a point estimate of the toxicant concentration that would cause a given percent reduction (p) in quantal biological measurement (e.g., larval development, survival) calculated from a continuous model (e.g., Probit).

18. "Interim Minimum Level" is calculated when a method-specified ML does not exist. It is equal to 3.18 times the method-specified method detection limit rounded to the nearest multiple of 1, 2, 5, 10, 20, 50, etc.

19. "Land Application" is the spraying or spreading of biosolids onto the land surface; the injection of biosolids below the land surface; or the incorporation of biosolids into the land so that the biosolids can either condition the soil or fertilize crops or vegetation grown in the soil. Land application includes distribution and marketing (i.e., the selling or giving away of the biosolids).

20. "Local Limits" are specific limits to implement the general and specific prohibitions in 40 CFR § 403.5 (a) and (b).

21. "Maximum daily discharge limitation" means the highest allowable "daily discharge."

22. "Minimum Level" (ML) is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes, and processing steps have been followed. Quantifying measurements below the ML requires extrapolation of the calibration relationship below the range of data used to establish the calibration. Such an extrapolation is not a preferred practice and leads to greater uncertainty in the quantitative result.

23. "No Observed Effect Concentration" (NOEC) is the highest concentration of toxicant to which organisms are exposed in a full life-cycle or partial life-cycle test, that causes no observable adverse effects on the test organisms (i.e., the highest concentration of toxicant in which the values for the observed responses are not statistically significantly different form the controls).

24. "Pathogen" means an organism that is capable of producing an infection or disease in a susceptible host.

25. "Pollutant" for the purposes of this permit is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or pathogenic organisms that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food-chain, could, on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.

26. "Receiving water concentration (RWC)" is the concentration of pollutant, including toxicity, at the edge of the mixing zone. For whole effluent toxicity, RWC, % effluent = $(Q_{eff})/(Q_{eff} + (\%MZ \text{ X } Q_{upstream}))$ X 100. Q_{eff} is the effluent design flow in cfs, $Q_{upstream}$ is the receiving water critical flow in cfs, and %MZ is the percent river mixing allowed by IDEQ.

27. "Runoff" is rainwater, leachate, or other liquid that drains overland on any part of a land surface and runs off of the land surface.

28. "Sewage Sludge" means solid, semi-solid, or liquid residue generated during the treatment of domestic sewage and/or a combination of domestic sewage and industrial waste of a liquid nature in a Treatment Works. Sewage sludge (biosolids) includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from biosolids. Biosolids does not include ash generated during the incineration of biosolids or grit and screenings generated during preliminary treatment of domestic sewage in a Treatment Works. These must be disposed of in accordance with 40 CFR Part 258.

29. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

30. "Significant changes in biosolids treatment processes" means treatment by pH adjustment (See 40 CFR § 503.32(b)(3)) or treatment to Class A by any of the methods listed in 40 CFR § 503.32(a)(3) -(a)(8).

31. A "24-hour composite" sample shall mean a flow-proportioned mixture of not less than 8 discrete aliquots. Each aliquot shall be a grab sample of not less than 100 ml and shall be collected and stored in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*.

32. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

33. "Vector Attraction" is the characteristic of biosolids that attracts rodents, flies, mosquitos or other organisms capable of transporting infectious agents.